

# Dennis Avenue

## Green Streets



### Quick Facts

|   |                 |
|---|-----------------|
| <b>Watershed:</b>                           | Anacostia River |
| <b>Sub-Watershed:</b>                       | Sligo Creek     |
| <b>Completion Year:</b>                     | 2014            |
| <b>Impervious Area Treated:</b>             | 17.9 acres      |
| <b>Maryland DNR Trust Fund Grant Award:</b> | \$2,549,814     |

### Pre-Restoration Conditions

Much of the development in the Sligo Creek watershed occurred before today's stormwater management practices were in place. In older neighborhoods, stormwater runs off roofs, driveways, and roads into storm drains and directly into streams, carrying trash, oils, nutrients, and other pollutants. The runoff also moves rapidly over paved surfaces, causing higher flows during storms, flash flooding, erosion, streambank instability, and degraded habitat.

### Design Approach

DEP partnered with the Department of Transportation (DOT) to implement retrofit stormwater management along Dennis Avenue and its side streets. The large median in the center of Dennis Avenue as well as the excess paved areas and right-of-way space provided opportunities for stormwater management in the neighborhood.

Raingardens, bioretention, and bioswales slow and filter stormwater and allow it to infiltrate into the ground. In the process sediment, nutrients, and other pollutants are removed from the runoff and the volume of runoff is reduced. Infiltration helps recharge streams and provide for healthy habitat. A paper street along Lanark Way between Renfrew and Portland Roads provided a large space for a stormwater and public amenity.



### Water Quality Protection

DEP restoration projects help reduce sediment and nutrient pollution entering local waterways and the Chesapeake Bay.

**Nitrogen**  
Reduced  
**333**  
lbs/yr

**Phosphorus**  
Reduced  
**28.1**  
lbs/yr

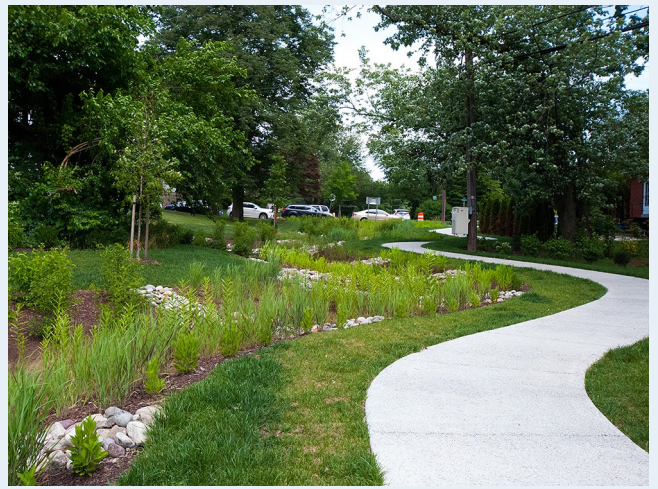
**Sediment**  
Reduced  
**7.01**  
tons/yr

Before



An asphalt swale on a paper street of Lanark Way between Portland and Renfrew Roads conveys stormwater.

After



The asphalt is replaced by a large sinuous swale which absorbs and filters runoff. A pervious sidewalk is added.

Before



Lanark Way is very wide. It's intersection with Renfrew Road presents an opportunity for stormwater control.

After



A bump-out bioswale is constructed in the right-of-way to slow and treat stormwater runoff from impervious areas.

Before



The large median in the center of Dennis Avenue is a good opportunity for stormwater management.

After



Runoff is piped to a large bioretention facility in the median. Excess runoff overflows into a storm drain inlet.

## Contact Us:

[AskDEP@montgomerycountymd.gov](mailto:AskDEP@montgomerycountymd.gov)



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